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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,918	10/12/2004	Ichizou Nakamura	121446	4876

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EXAMINER	
MAKI, STEVEN D	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/510,918	NAKAMURA, ICHIZOU	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *101204*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1) Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2) The disclosure is objected to because of the following informalities: The abstract should be one paragraph.

Appropriate correction is required.

3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4) Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the scope of "a part of the rubber constituting a top portion of the sub block has been removed to reduce the area of a upper face of the sub block" is ambiguous. One of ordinary skill in the art is not reasonably appraised of the scope of protection afforded by this language. It is not clear which block shapes fall within the scope of this language and which block shapes are excluded by this language. In particular, it is unclear if this requires the sides of the block to change.

In claim 5, --of the tread-- should be inserted after "negative ratio" to clarify what has the negative ratio.

As to claims 8 and 9, the scope and meaning of "bending portion" is unclear. What is bending (in contrast to what is bent)? Does bending portion require the inclination of the sidewall of the sub block to change? In claim 8, it is unclear how "when" affects the scope of the claim. Does claim 8 require a bending portion? Is the bending portion optional in claim 8? In claim 9, there is no antecedent basis for "said bending portion".

5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Japan 705

7) **Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 705 (JP 3-143705).**

Japan 705 discloses a pneumatic motorcycle tire having blocks B and semi-ribs 4, which are inherently made of rubber. The semi-ribs 4 have a lower height than the

main blocks B. See figures 1-3. The claimed sub blocks read on the semi-ribs 4 having the cross sectional shape shown in figure 3.

8) **Claims 1-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 705 (JP 3-143705).**

Japan 705 is considered to anticipate claims 1-4. In any event: As to claims 1-7 and 11, it would have been obvious to one of ordinary skill in the art to provide Japan 705's motorcycle tire such that the tread including the blocks and semi-ribs are made of rubber since it is taken as well known / conventional per se in the motorcycle tire art to use rubber to form a block pattern tire tread for a motorcycle tire.

As to claims 2-4, note arrangement of blocks and semi-ribs in figure 2.

As to claims 5-7, the claimed negative ratio of 65-97% would have been obvious and could have been determined without undue experimentation in view of (1) Japan 705's teaching to use motorcycle tire having the block pattern tread on soft soil and (2) the wide spacing of the blocks and semi-ribs in shown in Japan 705's figure 1. The claimed block area ratio would have been obvious and could have been determined without undue experimentation in view of Japan 705's teaching to add semi-ribs to increase tractive force. As to the curvature ratio, Japan 705's tire is a motorcycle tire - such as tire having a relatively large curvature ratio. See figure 1. As to the block height ratio, Japan 705 teaches a semi-rib height H = 33-50% block height D.

As to claim 11, it would have been obvious to one of ordinary skill in the art to provide Japan 705's pneumatic tire with a radial carcass since it is taken as well known /

conventional per se in the motorcycle art to use radial tire construction for pneumatic motorcycle tires.

Japan 417

9) **Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 417 (JP 2000-25417) in view of Potts et al (US 5088535).**

Japan 417 discloses a pneumatic motorcycle tire having a tread comprising main blocks 14, 18 and sub blocks 16. The negative ratio of the tread is at least 75%. The height of the sub blocks 16 is 40-80% of the height of the main blocks. One of ordinary skill in the art would readily understand that Japan 417's tread is made of rubber. In any event: it would have been obvious to one of ordinary skill in the art to provide Japan 417's tire such that the tread including the main blocks 14, 18 and sub blocks 16 are made of rubber since it is taken as well known / conventional per se in the motorcycle tire art to use rubber to form a block pattern tire tread for a motorcycle tire. Japan 417 teaches that the tire has remarkably improved skidding performance during cornering without impairing the traction performance on muddy ground. Japan 417 does not recite beveling the sub blocks.

As to claim 1, it would have been obvious to one of ordinary skill in the art to bevel the sub blocks 16 of Japan 417's motorcycle tire for use on muddy ground since Potts et al suggests beveling blocks of an off-road motorcycle tire so that during cornering the ground surface can drop between blocks and improve gripping action (col. 3 lines 12-28).

As to claims 2-4, note arrangement of main blocks 14, 18 and sub blocks 16 in the figures.

As to claims 5-7, the claimed block area ratio would have been obvious and could have been determined without undue experimentation in view of (1) Japan 417's teaching to add low height sub blocks 16 to improve skidding performance and (2) Potts et al's suggestion to bevel blocks to improve gripping action. As to the negative ratio, Japan 417 teaches using a negative ratio of at least 75%. As to the curvature ratio, Japan 417s tire is a motorcycle tire - such as tire having a relatively large curvature ratio. As to the block height ratio, Japan 417 teaches a sub block 16 height of 40-80% of the main block height.

As to claims 8 and 9, the claimed limitations regarding the bending portion would have been obvious in view of the above noted suggestion from Potts et al to bevel blocks.

As to claim 10, Japan 417 orients the low height sub blocks 16 in the circumferential direction. See figures.

As to claim 11, it would have been obvious to one of ordinary skill in the art to provide Japan 417's pneumatic tire with a radial carcass since it is taken as well known / conventional per se in the motorcycle art to use radial tire construction for pneumatic motorcycle tires.

Remarks

10) The remaining references are of interest.

11) No claim is allowed.

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki
June 9, 2006

Steven D. Maki 6-9-06
STEVEN D. MAKI
PRIMARY EXAMINER